

접수번호 : 19-074547-03-1  
(Receipt No.)



# 안전확인신고 증명서

## Confirmation Letter of Declaration

신고번호 (Application No.) : ZU10133-19010  
신고회사명 (Applicant) : Zhongshan Artesyn Technologies Co.,Ltd.  
주소 (Address) : No.62, Qi Guan Road West, Shiqi District, Zhongshan City, Guangdong, People's Republic of China 528400  
제품명 (Product) : 컴퓨터용 전원공급장치(Switching Power Supply)  
기본모델명 (Basic Model) : CSU550AP-3  
파생모델명 (Series Model) : See the attachment 2  
정격/안전기준상의 모델구분 (Rating) : AC 100-240 V, 50/60 Hz, 7.2 A-3.5 A (DC Output: 12.2 V / 45 A Max., 12.2 VSB / 2.5 A Max., Total output power not to exceed 550 W)  
안전기준 (Standard) : K60950-1(2011-12)

본 확인신고는 제조국명 : 중국  
제조업자명 : Zhongshan Artesyn Technologies Co.,Ltd.  
제조공장의 주소 : No.62, Qi Guan Road West, Shiqi District, Zhongshan City, Guangdong, People's Republic of China 528400  
의 제품에만 해당함

「전기용품 및 생활용품 안전관리법 시행규칙」 제28조제1항, 같은 조 제3항, 제29조제2항 또는 제34조제2항에 따라 안전확인신고 증명서를 발급합니다.

We issue this Confirmation Letter of Declaration of the Safety Confirmation for the above appliance in accordance with the Article 28(1), 28(3), 29(2) or 34(2) of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.

2019 년 12 월 12 일  
Year month day

한국산업기술시험원장  
KOREA TESTING LABORATORY



\* 이 신고증명서는 「전기용품 및 생활용품 안전관리법」에 따른 제품의 안전성 확인에 한정된 것이며, 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가로 인증·허가 등을 받아야 합니다.

첨부서류  
1. 전기용품의 안전관리부품 및 재질목록(List of Critical Components)(전기용품에 한정한다)  
2. 기본모델·파생모델의 내용(Description of the basic and series model)  
3. 안전확인신고 내용의 변경 현황(Revisions Status)

□ 첨부 1 : 전기용품의 안전관리부품 및 재질목록  
List of Critical Components

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
AC inlet	Rong Feng	SS-120	10 A, 250 Vac	VDE, ENEC
(Alternate)	Tecx-Unions	TU-301-S	10 A, 250 Vac	ENEC
Fuse (F1)	Conquer	UBM-A	10 A, min. 250 Vac/min. 300 Vdc	VDE
(Alternate)	Littelfuse	487 series	10 A, 420 Vac/ 420 Vdc	TUV
DC fan	AVC	DB04028B12U series	Rated 12V dc, 0.66 A	TUV
(Alternate)	Sunonwealth	PF40281B1-Q series	Rated 12V dc, 6.72 W	TUV
(Alternate)	Sunonwealth	PF40281BX-1Q series	Rated 12V dc, 5.88 W	TUV
Opto-coupler (U3)	LITE-ON	LTV-817 Series	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	Everlight	EL817	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	AVAGO	HCPL-817	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	LITE-ON	LTV-10XX	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	Everlight	EL101X	Isolation voltage Min. 3000 V rms	VDE
Opto-coupler (U308, U309, U310, U311)	LITE-ON	LTV-817 Series	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	Everlight	EL817	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	AVAGO	HCPL-817	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	LITE-ON	LTV-10XX	Isolation voltage Min. 3000 V rms	VDE
(Alternate)	Everlight	EL101X	Isolation voltage Min. 3000 V rms	VDE
Relay (K1)	Song Chuan	307HN-1AH-F-C series	Coil voltage: 12 Vdc. Min. 250 V, min. 10 A.	VDE
(Alternate)	Good Sky	GQ-SH-112LM1	Coil voltage: 12 Vdc. Min. 250 V, min. 10 A.	VDE
(Alternate)	Hongfa	HF32FV-T series	Coil voltage: 12 Vdc. Min. 250 V, min. 10 A.	VDE
Y-Capacitor (C98, C99) on AC inlet	Walsin	AH, AC	Rated max. 470 pF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Murata	KX, KY, KH	Rated max. 470 pF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Murata Electronics (Thailand) Ltd.	RA100K or RA120K or RA150K or RA180K or RA220K or RA270K or RA330K or RA390K or RA470K or RA560K or RA680K or RA680M or RA820K or RA820M or RA101K or RA101M or RA151K or RA151M or RA221K or RA221M or RA331K or RA331M or RA471K or RA471M	250 V, 10 pF or 12 pF or 15 pF or 18 pF or 22 pF or 27 pF or 33 pF or 39 pF or 47 pF or 56 pF or 68 pF or 82 pF or 100 pF or 150 pF or 220 pF or 330 pF or 470 pF	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Murata Electronics (Thailand) Ltd.	SA100K or SA120K or SA150K or SA180K or SA220K or SA270K or SA330K or SA390K or SA470K or SA560K or SA680K or SA680M or SA820K or SA820M or SA101K or SA101M or SA151K or SA151M or SA221K or SA221M or SA331K or SA331M or SA471K or SA471M	250 V, 10 pF or 12 pF or 15 pF or 18 pF or 22 pF or 27 pF or 33 pF or 39 pF or 47 pF or 56 pF or 68 pF or 82 pF or 100 pF or 150 pF or 220 pF or 330 pF or 470 pF	KC
(Alternate)	TDK	CD, CS	Rated max. 470 pF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Kemet	PME295	Rated max. 470 pF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Xiamen Faratronic	MKP63 or C43	Rated max. 470 pF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Kemet	F881	Rated max. 470 pF, min. 250 V. Marked with Y1 or Y2	IMQ, ENEC
Y-Capacitor (C2, C3)	Xiamen Faratronic	MKP63 or C43	Rated max. 2.2 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Kemet	F881	Rated max. 2.2 nF, min. 250 V. Marked with Y1 or Y2	IMQ, ENEC
(Alternate)	Vishay	338 6	Rated max. 2.2 nF, min. 250 V. Marked with Y1 or Y2	ENEC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Walsin	AH, AC	Rated max. 2.2 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Murata	KX, KY	Rated max. 2.2 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Murata Electronics (Thailand) Ltd.	RA100K or RA120K or RA150K or RA180K or RA220K or RA270K or RA330K or RA390K or RA470K or RA560K or RA680K or RA680M or RA820K or RA820M or RA101K or RA101M or RA151K or RA151M or RA221K or RA221M or RA331K or RA331M or RA471K or RA471M or RA681K or RA681M or RA102K or RA102M or RA152M or RA222M	250 V, 10 pF or 12 pF or 15 pF or 18 pF or 22 pF or 27 pF or 33 pF or 39 pF or 47 pF or 56 pF or 68 pF or 82 pF or 100 pF or 150 pF or 220 pF or 330 pF or 470 pF or 680 pF or 1000 pF or 1500 pF or 2200 pF	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Murata Electronics (Thailand) Ltd.	SA100K or SA120K or SA150K or SA180K or SA220K or SA270K or SA330K or SA390K or SA470K or SA560K or SA680K or SA680M or SA820K or SA820M or SA101K or SA101M or SA151K or SA151M or SA221K or SA221M or SA331K or SA331M or SA471K or SA471M or SA681K or SA681M or SA102K or SA102M or SA152M or SA222M	250 V, 10 pF or 12 pF or 15 pF or 18 pF or 22 pF or 27 pF or 33 pF or 39 pF or 47 pF or 56 pF or 68 pF or 82 pF or 100 pF or 150 pF or 220 pF or 330 pF or 470 pF or 680 pF or 1000 pF or 1500 pF or 2200 pF	KC
(Alternate)	TDK	CD, CS	Rated max. 2.2 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
Y-Capacitor (C4, C5)	Xiamen Faratronic	MKP63 or C43	Rated max. 4.7 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Kemet	F881	Rated max. 4.7 nF, min. 250 V. Marked with Y1 or Y2	IMQ, ENEC
(Alternate)	Vishay	338 6	Rated max. 4.7 nF, min. 250 V. Marked with Y1 or Y2	ENEC
(Alternate)	Walsin	AH, AC	Rated max. 4.7 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Murata	KX, KY	Rated max. 4.7 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
(Alternate)	Murata Electronics (Thailand) Ltd.	RA100K or RA120K or RA150K or RA180K or RA220K or RA270K or RA330K or RA390K or RA470K or RA560K or RA680K or RA680M or RA820K or RA820M or RA101K or RA101M or RA151K or RA151M or RA221K or RA221M or RA331K or RA331M or RA471K or RA471M or RA681K or RA681M or RA102K or RA102M or RA152M or RA222M or RA332M or RA472M	250 V, 10 pF or 12 pF or 15 pF or 18 pF or 22 pF or 27 pF or 33 pF or 39 pF or 47 pF or 56 pF or 68 pF or 82 pF or 100 pF or 150 pF or 220 pF or 330 pF or 470 pF or 680 pF or 1000 pF or 1500 pF or 2200 pF or 3300 pF or 4700 pF	KC

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Murata Electronics (Thailand) Ltd.	SA100K or SA120K or SA150K or SA180K or SA220K or SA270K or SA330K or SA390K or SA470K or SA560K or SA680K or SA680M or SA820K or SA820M or SA101K or SA101M or SA151K or SA151M or SA221K or SA221M or SA331K or SA331M or SA471K or SA471M or SA681K or SA681M or SA102K or SA102M or SA152M or SA222M or SA332M or SA472M	250 V, 10 pF or 12 pF or 15 pF or 18 pF or 22 pF or 27 pF or 33 pF or 39 pF or 47 pF or 56 pF or 68 pF or 82 pF or 100 pF or 150 pF or 220 pF or 330 pF or 470 pF or 680 pF or 1000 pF or 1500 pF or 2200 pF or 3300 pF or 4700 pF	KC
(Alternate)	TDK	CD, CS	Rated max. 4.7 nF, min. 250 V. Marked with Y1 or Y2	VDE, ENEC
X-Capacitor (C1)	Xiamen Faratronic	MKP62 or C42	Rated max. 680 nF, min. 250 V. Marked with X1 or X2	VDE, ENEC
(Alternate)	Hua Jung	MKP series	Rated max. 680 nF, min. 250 V. Marked with X1 or X2	ENEC
(Alternate)	Carli	MPX series	Rated max. 680 nF, min. 250 V. Marked with X1 or X2	VDE



부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	Liow Gu	GS-L	Rated max. 680 nF, min. 250 V. Marked with X1 or X2	FI, ENEC
(Alternate)	Iskra	KNB1560 series	Rated max. 680 nF, min. 250 V. Marked with X1 or X2	VDE, ENEC
(Alternate)	Kemet	PHE840E, PHE840M	Rated max. 680 nF, min. 250 V. Marked with X1 or X2	Semko, ENEC
X-Capacitor (C6)	Xiamen Faratronic	MKP62 or C42	Rated max. 470 nF, min. 250 V. Marked with X1 or X2	VDE, ENEC
(Alternate)	Hua Jung	MKP series	Rated max. 470 nF, min. 250 V. Marked with X1 or X2	ENEC
(Alternate)	Carli	MPX series	Rated max. 470 nF, min. 250 V. Marked with X1 or X2	VDE
(Alternate)	Liow Gu	GS-L	Rated max. 470 nF, min. 250 V. Marked with X1 or X2	FI, ENEC
(Alternate)	Iskra	KNB1560 series	Rated max. 470 nF, min. 250 V. Marked with X1 or X2	VDE, ENEC
(Alternate)	Kemet	PHE840E, PHE840M	Rated max. 470 nF, min. 250 V. Marked with X1 or X2	Semko, ENEC
Discharge Resistor (R1, R2, R3, R4, R5, R6, R7, R8)	Interchangeable	Interchangeable	Max. 124 kΩ , Min. 0.125 W	Tested with appliance
Power Transformer (T1)	Astec or Artesyn	801-004512-XXXX (XXXX is any number which do not effect safety)	Class F	Tested with appliance

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Auxiliary transformer (T900)	Astec or Artesyn	801-006063-XXXX (XXXX is any number which do not effect safety)	Class F	Tested with appliance
Gate Drive Transformer (T300)	Astec or Artesyn	801-002684-XXXX, 8060160-XXXX (XXXX is any number which do not effect safety)	Class F	Tested with appliance
Inductor (L2, L4)	ASTEC or Artesyn	801-007517-XXXX (XXXX is any number which do not effect safety)	130 °C	Tested with appliance
Inductor (L3)	ASTEC or Artesyn	801-007455-XXXX (XXXX is any number which do not effect safety)	130 °C	Tested with appliance
(Alternate)	Astec or Artesyn	801-007694-XXXX (XXXX is any number which do not effect safety)	130 °C	Tested with appliance
Inductor (L5)	ASTEC or Artesyn	801-007437-XXXX (XXXX is any number which do not effect safety)	130 °C	Tested with appliance
Inductor (L6)	Astec or Artesyn	801-007627-XXXX (XXXX is any number which do not effect safety)	130 °C	Tested with appliance
(Alternate)	Astec or Artesyn	801-007699-XXXX (XXXX is any number which do not effect safety)	130 °C	Tested with appliance
Insulator (Located Wrapped all PCB board )	Toray	Lumirror S10	VTM-2, 105 °C.	UL
Insulator (Located adhered on HTSKA2)	Arlon	Secure 1500FG(x)(v)(m)	V-0, 150 °C.	UL

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
(Alternate)	BERGQUIST	Bond Ply LMS-HD	V-0, 150 °C.	UL
Insulator (Located adhered on Fan)	Sabic	FR1	VTM-0, min. 0.4 mm thick, 125 °C.	UL
(Alternate)	ITW	Formex GK-17	VTM-0, min. 0.4 mm thick, 125 °C.	UL
Tape (used Wrapped the LED wire & FAN wire)	P Leo	1K7170, 1K220	220 °C	UL
(Alternate)	Teraoka	652S #25, 650S #25	200 °C	UL
(Alternate)	Cen	CENPI	V-0, 130 °C	UL
(Alternate)	3M	1350F-1, Super 10, 1318	Min. 130 °C	UL
(Alternate)	Symbio	35660	130 °C	UL
(Alternate)	Jingjiang Yahua	CT series	130 °C	UL
Tape (used between U3 and control board)	P Leo	1K7170, 1K220	220 °C	UL
(Alternate)	Teraoka	652S #25, 650S #25	200 °C	UL
(Alternate)	Cen	CENPI	V-0, 130 °C	UL
(Alternate)	3M	1350F-1, Super 10, 1318	Min. 130 °C	UL
(Alternate)	Symbio	35660	130 °C	UL
(Alternate)	Jingjiang Yahua	CT series	130 °C	UL
PWB	Interchangeable	Interchangeable	Min. V-0, Min. 130 °C	UL
Enclosure	Interchangeable	Interchangeable	Metal	Tested with appliance

유의사항 (Attention) :

1. 안전관리부품은 전기적인 안전에 직접적인 영향을 주는 부품으로서 안전인증기관이 정기공장검사 시 확인 관리 하는 사항입니다. 따라서 상기목록에 기재된 사항을 변경하거나 또는 복수등재를 원하시는 경우는 안전인증기관에 인증변경신청을 하여야 합니다.

*As the "Critical components" are parts in directly related with safety, these components shall be checked during a factory inspection by the certification body. In case of applying multiple listing or changing the items above, the certification revision shall be applied.*

2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.

*The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.*

□ 첨부 2 : 기본모델 · 파생모델의 내용

Description of the basic and series model

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
CSU550AP-3-001	Same as basic model except for fan airflow direction and model designation.
CSU550AP-3-301	Same as basic model except for fan airflow direction and model designation.
CSU550AP-3-401	Same as basic model except for fan airflow direction and model designation.
CSU550AP-3-501	Same as basic model except for fan airflow direction and model designation.
CSU550AP-3-100	Same as basic model except for model designation.
CSU550AP-3-200	Same as basic model except for model designation.
CSU550AP-3-300	Same as basic model except for model designation.
CSU550AP-3-400	Same as basic model except for model designation.
CSU550AP-3-500	Same as basic model except for model designation.
CSU550AP-3-600	Same as basic model except for model designation.
CSU550AP-3-700	Same as basic model except for model designation.
CSU550AP-3-800	Same as basic model except for model designation.
CSU550AP-3-900	Same as basic model except for model designation.
<b>제품특기사항 및 시험조건</b> Remarks & Test conditions	
<p>1. Review Report No. : 19-074547-03-2 (2019.12.11)</p> <p>2. Product Description</p> <ul style="list-style-type: none"> <li>- Class of equipment: Class I</li> <li>- Protection against ingress of water: IP X0</li> <li>- Mass of equipment (kg): Approximate 1 kg</li> <li>- Rating: AC 100-240 V, 50/60 Hz, 7.2 A-3.5 A</li> </ul> <p>(DC Output: 12.2 V / 45 A Max., 12.2 VSB / 2.5 A Max., Total output power not to exceed 550 W)</p>	
<p>□ 본 제품의 검토내용에 관하여 문의하실 사항이 있으시면 아래 연락처로 문의하시기 바랍니다. 검토담당자 : BK 전략본부 인증관리센터 박 일 우 / 02-860-1436</p> <p>□ If you have any question on product review, please contact the person below : Job holder : BK Strategy Division, Certification Management Center, Il-Woo Park / +82 2 860-1436</p>	

FP511-05

**첨부 3 : 안전확인신고 내용의 변경 현황**  
Revisions Status

변경발급 내용 Contents of Certificate Revisions
Not applicable

FP511-06

첨부 : 제품사진  
Photographs



